### & Goals &

✓ Trans. pol. protons colliding at ~100 GeV per beam (P > 50%).

✓ Commission acceleration of pol. protons to 250 GeV per beam.





### & Schedule &

№ 8 Nov: 1 shift shutdown to install AGS polarimeter.

 $\sim$  9  $\rightarrow$  26 Nov: Au in RHIC; pol protons in AGS.

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ightharpoonup 29 Nov: Shutdown to change RHIC to pol. protons. Run pol. protons in AGS.

 $\sim$  30 Nov. $\rightarrow$ 21 Dec.: Commission pol. protons in RHIC.

 $\sim$  22 Dec.  $\rightarrow$  25 Jan.: Physics with pol. protons.



## & RHIC Commissioning Plan &

- $\sim$  Test injection into  $\beta^* = 3$  m lattice with Au.
- ✓ Commission ac dipole. (with Au?)
- ✓ Set up injection with protons.
- ✓ Set up snakes, flatten orbits.
- ✓ Commission polarimeters with vert. pol. at injection.
- $\sim$  Use ac dipole to calibrate snakes ( $\nu_{\rm s}=0.5$ ).
- Accelerate pol. protons to 100 GeV; collide beams.
- → Decelerate pol. protons back to injection.
- ✓ Turn off 1 snake at storage to obtain horiz. pol.
- $\sim$  Calibrate energy at storage (accel through  $\Delta G \gamma = 1$ ).
- → Accelerate pol. protons to 250 GeV.



# & Nominal Snake Settings &

$\gamma$	$B_{ m out}$ [A]	$B_{ m in}   [{ m A}]$	$\mu$	$\phi$
25.94	-99.98	325.34	$179.81^{\circ}$	$-45.11^{\circ}$
107.09	-99.98	326.34	$179.98^{\circ}$	$-45.00^{\circ}$
107.09	-95.98	340.34	$179.63^{\circ}$	$-52.11^{\circ}$

From Vahid's tracking through measured helices.





#### & Other links &

AGS commissioning plan:
 http://www.rhichome.bnl.gov/People/huang/pp02/FY02plan.htm

Previous talks:
 http://www.rhichome.bnl.gov/RHIC/Spin/spinfigs/figslist.html
 http://www.rhichome.bnl.gov/RHIC/Spin/spinfigs/wwm-rsc1oct01.pdf

Polarization angles at IR's and polarimeters for different energies:
 http://www.rhichome.bnl.gov/RHIC/Spin/spinfigs/100GeV-1snake.html

